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## INTERNATIONAL SEARCH REPORT

PCT/GB 03/02397

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 G06K7/10

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**
 Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ROBERTS D A ET AL: "1D and 2D laser line scan generation using a fibre optic resonant scanner" MICRO-OPTO-ELECTRO-MECHANICAL SYSTEMS, GLASGOW, UK, 22-23 MAY 2000, vol. 4075, pages 62-73, XP008022333 Proceedings of the SPIE - The International Society for Optical Engineering, 2000, SPIE-Int. Soc. Opt. Eng, USA ISSN: 0277-786X cited in the application figure 1 --- -/--	1,7,25

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*S\* document member of the same patent family

Date of the actual completion of the international search

22 September 2003

Date of mailing of the international search report

10/10/2003

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

PCT/GB 03/02397

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ROBERTS D A ET AL: "Dual numerical aperture confocal operation of moving fibre bar code reader" ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 35, no. 19, 16 September 1999 (1999-09-16), pages 1656-1658, XP006012714 ISSN: 0013-5194 cited in the application the whole document</p> <p>---</p>	1,7,25
X	<p>SYMS R R A: "Long-travel electrothermally driven resonant cantilever microactuators" JOURNAL OF MICROMECHANICS AND MICROENGINEERING, MAY 2002, IOP PUBLISHING, UK, vol. 12, no. 3, pages 211-218, XP002255211 ISSN: 0960-1317 cited in the application figures 1,2 page 217, left-hand column, last paragraph</p> <p>---</p>	1,7,25
A	<p>GERLACH T ET AL: "Automatic adjustment of monomode optical waveguides by a microsystem" SEVENTH WORKSHOP ON MICROMACHINING, MICROMECHANICS AND MICROSYSTEMS IN EUROPE, MME '96, BARCELONA, SPAIN, 21-22 OCT. 1996, vol. 7, no. 3, pages 227-229, XP002255212 Journal of Micromechanics and Microengineering, Sept. 1997, IOP Publishing, UK ISSN: 0960-1317 the whole document</p> <p>---</p>	1,25
A	<p>HOFFMANN M ET AL: "MICROMECHANICAL CANTILEVER RESONATORS WITH INTEGRATED OPTICAL INTERROGATION" SENSORS AND ACTUATORS A, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. A44, no. 1, 1 July 1994 (1994-07-01), pages 71-75, XP000469157 ISSN: 0924-4247 page 71, left-hand column, paragraph 1 figure 1</p> <p>---</p> <p style="text-align: center;">-/--</p>	1,25

## INTERNATIONAL SEARCH REPORT

PCT/GB 03/02397

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KAN S C ET AL: "Silicon-on-insulator (SOI) movable integrated optical waveguide technology" SENSORS AND ACTUATORS A, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 54, no. 1-3, 1 June 1996 (1996-06-01), pages 679-683, XP004077947 ISSN: 0924-4247 the whole document ---	1,25
A	US 4 311 999 A (GOODMAN JAMES R ET AL) 19 January 1982 (1982-01-19) column 5, line 16 - line 19; figure 6 ---	2
A	EP 0 875 780 A (ROCKWELL INTERNATIONAL CORP) 4 November 1998 (1998-11-04) cited in the application column 13, line 54 -column 14, line 16; figure 10 -----	2

# INTERNATIONAL SEARCH REPORT

PCT/GB 03/02397

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 23,24  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box I.2

Claims Nos.: 23,24

Present claims 23 and 24 relate to an extremely large number of possible systems. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the systems claimed. In the present case, these claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

## INTERNATIONAL SEARCH REPORT

PCT/GB 03/02397

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4311999	A	19-01-1982	NONE	
EP 0875780	A	04-11-1998	US 5903380 A	11-05-1999
			EP 0875780 A2	04-11-1998
			JP 10325935 A	08-12-1998
			US 6094289 A	25-07-2000

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